CLAIMS

1. A welding method for gas metal arc welding with continuous electrode feeding comprising process control for short arc and/or spray arc welding, and also for short pulsing for separating off essentially one droplet per pulse, characterized in that the process control according to the short pulse method is caused to alternate cyclically between this and the process control for short arc or spray arc welding without the arc being intentionally extinguished in between and in that the time for at least one of these process control methods is determined by a time programmed in by the user.

2. The welding method as claimed in claim 1, characterized in that the time for the second process control method is determined by a frequency for the cyclic alternating between the process control methods programmed in by the user.

3. A welding power source for MIG/MAG welding comprising a first process regulator for short arc and/or spray arc welding and, in addition, a second process regulator for short pulsing for separating off essentially one droplet per pulse, characterized in that it also comprises means for carrying out the welding method as claimed in claim 1 or 2.

4. The welding power source as claimed in claim 3, where the means comprises a timer that can be set for times of 25 to 1000 ms.

5. The welding power source as claimed in claim 3, where the means comprises a timer that can be set for times of 50 to 300 ms.

6. The welding power source as claimed in any one of

claims 3 - 5, where the means also comprises a setting device with special support for facilitating programming of a first phase with setting data for short arc or spray arc parameters and a second phase with setting data for the short pulsing.

7. The welding power source as claimed in claim 6, where the means also comprises a setting device with special support for facilitating programming of the alternating between the first and second phases.

8. A control box that can be connected to a welding set as claimed in any one of claims 3 - 7, characterized in that it comprises a setting device with special support for facilitating programming of a first phase with setting data for short arc or spray arc parameters and a second phase with setting data for the short pulsing.

9. The control box as claimed in claim 8, characterized in that it comprises a setting device with special support for facilitating programming of the alternating between the first and second phases.

10. Software for carrying out the method as claimed in claim 1 or 2 in a welding set.